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Application Serial Number:

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Revised 01/24/05

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RAW SEQUENCE LISTING

PATENT APPLICATION: UB/10/547,532

DATE: 09/13/2005

TIMB: 13:24:41

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\09132005\J547532.raw

pr 1-10

3 <110> APPLICANT: SHINTANI, ET AL.

5 <120> TITLE OF INVENTION: MEDICINAL USE OF MIP-3a INHIBITOR AND METHOD OF SCREENING

America and humber are completely misaligned

BRAIN/NERVE

CELL PROTECTIVE AGENT

8 <130> FILE REFERENCE: 20039.1USWO

C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/547,532

C--> 11 <141> CURRENT FILING DATE: 2005-08-31

13 <150> PRIOR APPLICATION NUMBER: PCT/JP2004/002774

14 <151> PRIOR FILING DATE: 2004-03-04

16 <150> PRIOR APPLICATION NUMBER: JP 2003-056885

17 <151> PRIOR FILING DATE: 2003-03-04

19 <150> PRIOR APPLICATION NUMBER: JP 2003-106247

20 <151> PRIOR FILING DATE: 2003-04-10

22 <160> NUMBER OF SEQ ID NOS: 21

24 <170> SOFTWARE: PatentIn version 3.1

ERRORED SEQUENCES

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28 <212> TYPE: DNA

29 <213> ORGANISM: Homo sapiens

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34 <223> OTHER INFORMATION:

36 <220> FEATURE:

37 <221> NAME/KEY: sig_peptide

38 <222> LOCATION: (1)..(78)

39 <223> OTHER INFORMATION:

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42 <221> NAME/KEY: mat peptide

43 <222> LOCATION: (79)..()

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W--> 49 -20 -15

cta ctc cac ctc tgc ggc gaa tca

W--> 50 gaa gca gca agc aac ttt gac tgc

96Leu Leu His Leu Cys Gly Glu Ser Glu Ala

E--> 81 ala ser asn Phe asp cys -10

-5

tgt ctt gga tac aca gac cgt att ctt cat cct aaa ttt att gtg ggc

Y√-> 53 144Cys Leu Gly Tyr Thr Asp Arg Ile Leu His Pro Lys Phe Ile Val Gly

ttc aca cgg cag ctg

Ones Not Comply Oraclod Disketto Need

part a
hard return.
Amino and go directly
under their

48Met Cys

Best Available Cop 9/13/05

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RAW SEQUENCE LISTING DATE: 09/13/2005
PATENT APPLICATION: US/10/547,532 TIME: 13:24:41

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\09132005\J547532.raw

some eno

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W--> 55 gcc aat gaa ggc tgt gac atc aat gct atc atc
                                                        192Phe Thr Arg Gln Leu Ala Asn
B--> 56 glu gly cys asp Ile asn ala Ile Ile
                                                           25
W--> 57 35
                              ttt cac aca aag aaa aag ttg tct gtg tgc gca aat cca aaa
                     240Phe His Thr Lys Lys Leu Ser Val Cys Ala Asn Pro Lys Gln Thr
W--> 58 cag act
W--> 59
           40
                               45
                                                   50
W--> 60 and tat att gtg cgt ctc ctc agt and and gtc ang acc atg
                                                                    288Trp Val Lys Tyr
E--> 61 Ile val arg Leu Leu ser Lys Lys val Lys asn met 55
B--> 62 65
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     91 <223> OTHER INFORMATION:
     93 <220> FEATURE:
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     96 <223> OTHER INFORMATION:
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     99 <221> NAME/KEY: mat peptide
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                                                                             48Met Ala
E--> 105 cys Lys his Leu Pro Phe Leu ala Leu ala gly val Leu Leu
E--> 106 -20
                            -15
W--> 107 gct tac ctc tgc agc cag tca gaa gca gca agc aac ttt gac tgc tgc
W--> 108 Leu Cys Ser Gln Ser Glu Ala Ala Ser Asn Phe Asp Cys Cys
W--> 109 -5 -1 1
                                           5
                                                               ctc acg tac aca aag aac
W--> 110 gtg tat cat cat gcg aga aat ttt gtg ggt
                                                    144Leu Thr Tyr Thr Lys Asn Val Tyr
E--> 111 his his ala arg asn Phe val gly
W--> 112 20
                               tte aca aca cag atg gee gae gaa get tgt gae att aat get
W--> 113 atc atc
                     192Phe Thr Thr Gln Met Ala Asp Glu Ala Cys Asp Ile Asn Ala Ile Ile
                          . 30
W--> .114 25
                                                35
                                                                           ttt cac ctg
W--> 115 aag tog aaa aga too gtg tgo got gac coa aag cag atc
                                                                240Phe His Leu Lys Ser
E--> 116 Lys arg ser val cys ala asp Pro Lys gln Ile
                                                           40
                          . 55
W--> 117 50
                                     tgg gtg aaa agg att ttg cac ctc ctc agc cta aga
W--> 118 acc aag aag atg
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    147 <222> LOCATION: (1)..(291)
    148 <223> OTHER INFORMATION:
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RAW SEQUENCE LISTING DATE: 09/13/2005
PATENT APPLICATION: US/10/547,532 TIME: 13:24:41

Input Set : A:\PTO.AMC.txt

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B--> 162 cys gly gly Lys arg Leu Leu Phe Leu ala Leu ala trp val
                        -15
W--> 163 -20
                                                   ctg ctg gct cac ctc tgc agc cag gca
W--> 164 gaa gca gca agc aac tac gac
                                        96Leu Leu Ala His Leu Cys Ser Gln Ala Glu Ala
B--> 165 ala ser asn tyr asp
                                        -10
W--> 166 5 tgt tgc ctc tcg tac ata cag acg cct ctt cct tcc aga gct att gtg
W--> 167 144Cys Cys Leu Ser Tyr Ile Gln Thr Pro Leu Pro Ser Arg Ala Ile Val
W--> 168 10
                            15 -
                                               20
                                                              ggt tto aca aga cag atg
W--> 169 gcc gat gaa gct tgt gac att aat gct atc
                                                    192Gly Phe Thr Arg Gln Met Ala Asp
E--> 170 glu ala cys asp Ile asn ala Ile
                                                            25
W--> 171 35
                           atc ttt cac acg aag aaa aga aaa tct gtg tgc gct gat cca aag
W--> 172 cag
                  240Ile Phe His Thr Lys Lys Arg Lys Ser Val Cys Ala Asp Pro Lys Gln
W--> 173 40
                            45
                                               50 .
                                                                      aac tgg gtg.aaa
W--> 174 agg gct gtg aac ctc ctc agc cta aga gtc aag aag
                                                            288Asn Trp Val Lys Arg Ala
                                                            55
E--> 175 val asn Leu Leu ser Leu arg val Lys Lys
W--> 176 65
B--> 177 291met
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E--> 212 gly glu ser met asn Phe ser asp val Phe asp ser ser glu
                            10
                                               15
                                                               gat tat ttt gtg tca gtc
W--> 214 aat act tca tat tac tca gtt gat tct gag
                                                     96Asp Tyr Phe Val Ser Val Asn Thr
E--> 215 ser tyr tyr ser val asp ser glu
                            atg tta ctg tgc tcc ttg cag gag gtc agg cag ttc tcc agg cta
W--> 216 30
W--> 217 ttt
                 144Met Leu Leu Cys Ser Leu Gln Glu Val Arg Gln Phe Ser Arg Leu Phe
W--> 218 35
                            40
                                               45
                                                                       gta ccg att gcc
W--> 219 tac tcc ttg atc tgt gtc ttt ggc ctc ctg ggg aat
                                                            192Val Pro Ile Ala Tyr Ser
E--> 220 Leu Ile cys val Phe gly Leu Leu gly asn
                                                           50
W--> 221 60
                                   att ctg gtg gtg atc acc ttt gct ttt tat aag aag gcc
W--> 222 agg tct atg
                         240Ile Leu Val Val Ile Thr Phe Ala Phe Tyr Lys Lys Ala Arg Ser
E--> 223 met
                   65
W--> 224 aca gac gtc tat etc ttg aac atg gee att gea gac ate etc ttt gtt
                                                                            288Thr Asp
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DATE: 09/13/2005 RAW SEQUENCE LISTING PATENT APPLICATION: US/10/547,532 TIME: 13:24:41

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF4\09132005\J547532.raw

W>																	11	rn	ىرىن		
W>	225	Val	Tyr	Leu	Leu	Asn	Met	Ala	Ile	Ala	Asp	Ile	Leu	Phe	Val			•			
																					tgg
											gtt		33	6Leu	Thr	Leu	Pro	Phe	Trp	Ala	Val
E>	228	ser	his	ala	thr	gly	ala	trp	val						100					105	
M>							ttc	agc	aat	gcc	acg	tgc	aag	ttg	cta	888	ggc	atc	tat	gcc	atc
W>	230	aac		38	4Phe	Ser	Asn	. Ala	Thr	Сув	Lys	Leu	Leu	ГЛВ	Gly	Ile	Tyr	Ala	Ile	yau	
M>	231	115					120			·		125				-		ttt	aac	tgc	999
W> W> E>	232	atg	ctg	ctc	ctg	act	tgc	att	agc	atg	gac	cgg	tac		43	2Phe	Asn	Сув	Gly	Met	Leu
E>	233	Leu	Leu	thr	сув	Ile	ser	met	авр	arg	tyr				130					135	
										3		3-0		3~3	~~~	~~3	~~~		~33		-9-
W>							OIle	Ala	Ile		Gln	Ala	Thr	Lys		Phe	Arg	Leu	Arg		Arg
E>					145					150		_	_		155					160	
M>	237	cta	ccg	cgc	agc	888	atc	atc	tgc	att	gtt	gtg	tgg	999	ctg	tca	gtc	•	52	BLeu	Pro
W>				Lys	Ile	IIe		Leu	Val	Val	Trp	_		Ser	Val			_0			
W>							170		<i>)</i>			175					atc		-		
W>			_							açc	caa		570	PITE		ser	ser	ser	Thr		Val
B>				gın	гля	tyr			_						180					185	
W>				62	467	C										cag					
W>				02	401A	261	200	Val	cys	GIU	PIO	205	ıyı	GIII	Int	AGI	261				
W>				++-		att		ata	ata.		t				67	23	T				ctg
B>	246	Len	aly	LLY	999	Len	J.AH	Pho	alv	Dho	Dha	LLC			210	anig	Itp	гув	rea	215	Mer
W>			9-7	Dea	gru	Tea	Med	•					tta	2+4		ttt	tat	tan'	200		att
W>			222	200		720	1114	Pro	T.OU	Mat	Dho	Mot	Tle	Dha	Cva	Tur	The	Dha	Tia	Ve I	Luc
B>										230					235	-7-	****	2 440		240	<i></i> 1
W>									aaa		cac					ota	atc		768		Val
W>																300				,	
W>							-	5		_						ata	act	ata	ata	ctt	ata
W>			ctg	gct	tat	cag															
B>											_				260					265	
W>										gtg	açg	gct	gca	aat	ttg	ggt	aaa	atq	aac	cga	tcc
W>	256	tgc		864	Val	Leu	Leu	Val	Thr	Ala	Ala	Asn	Leu	Gly	Lys	Met	Asn	Arg	Ser	Сув	
W>	257	275					280					285		_	_			cag	agc	gaa	aag
W> W> B>	258	cta	att	ggc	tat	acg	aaa	act	gtc	aca	gaa	gtc	ctg		912	RGln	Ser	Glu	Lys	Leu	Ile
B>	259	gly	tyr	thr	Lys	thr	val	thr	glu	val	Leu				290	•				295	
W>	260	300							gct	ttc	ctg	cac	tgc	tgc	ctg	aac	cct	gtg	ctc	taç	gct
			att				Ala	Phe	Leu	Hìp	Сув	Сув	Leu	Asn	Pro	Val	Leu	Tyr	Ala	Phe	Ile'
B~->					305					310	•				315					320	
W>																tgg	tgt		1008	Gln	Lys
M>			Arg	Asn	Tyr	Phe		Lys	Ile	Leu											
W>							330									gtg					
M>	266	tcc	tca	ggc	ttc	tcc	tgt	gcc	999	agg	tac		1056	Val	Arg	Arg		Tyr	Lys	Ser	8er
B>				ser	сув			_	-						340		•			345	
₩>					_		tca	gaa	aac	att	tct	cgg	cag	acc	agt	gag	acc	gca	gat	aac	gac
W>				1104	Ser			Ile	Ser	Arg			Ser	Glu	Thr	Ala	_		_		
W>							360					365						gcg	_		
₩>			atg												1122	Ala	Ser	Ser	Phe	Thr	Met
E>				. T-	370	0 -					•										
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RAW SEQUENCE LISTING DATE: 09/13/2005 PATENT APPLICATION: US/10/547,532 TIME: 13:24:41

Input Set : A:\PTO.AMC.txt

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Output Set: N:\CRF4\09132005\J547532.raw

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RAW SEQUENCE LISTING DATE: 09/13/2005 PATENT APPLICATION: US/10/547,532 TIME: 13:24:41

Input Set : A:\PTO.AMC.txt

```
W--> 381 245
                                             255
                                                            get tgt cag atc cet cac
w--> 382 aac atg gtc ctc ctc gtg act gcg gtc aac 816Ala Cys Gln Ile Pro His Asn Met
E--> 383 val Leu Leu val thr ala val asn
                                                        260
                        acg ggc aaa gtg ggc cgg agc tgc agc acc gag aaa gtc ctc gcc
W--> 384 270
W--> 385 tac
                 864Thr Gly Lys Val Gly Arg Ser Cys Ser Thr Glu Lys Val Leu Ala Tyr
W--> 386 275
                          280
                                        285
                                                               acc agg aac gtg
W--> 387 gcc gag gtc ctg gct ttc ctg cat tgc tgc ctc aac
                                                         912Thr Arg Asn Val Ala Glu
E--> 388 val Leu ala Phe Leu his cys cys Leu asn
                                                         290
W--> 389 300 ccc gtg ttg tat gcg ttt att gga cag aaa ttc aga aac
W--> 390 tac ttc atg 960Pro Val Leu Tyr Ala Phe Ile Gly Gln Lys Phe Arg Asn Tyr Phe
E--> 391 met 305
                                     310
                                                         315
.1008Lys Ile
W--> 393 Met Lys Asp Val Trp Cys Met Arg Arg Lys Asn Lys Met Pro
                                                           ggc ttc ctc tgt gcc cgg
W--> 394 325
                          330
                                        335
W--> 395 gtt tac tcg gaa agc tac atc tcc agg cag . 1056Gly Phe Leu Cys Ala Arg Val Tyr
E--> 396 ser glu ser tyr Ile ser arg gln
                                                        340
W--> 397 350 acc agt gag acc gtc gas ast gat ast gcs tcg tcc ttt acc atg
W--> 398 1101Thr Ser Glu Thr Val Glu Asn Asp Asn Ala Ser Ser Phe Thr Met
E--> 399 355
                           360
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W--> 493 1700cacctgcag titigaagtea teaetiticaa teeeectgig actagggcca gggtetteae
W--> 494 180 acctgcgaga ggaagcaaag atctaagcaa tctgaatttt aagagagaaa ctgcagctgt
W--> 495 240cggtttgtgg gccggaacat tattggactg gagcctggac aagcactaag gcgggggtac
E--> 496 300ctggccagcc cacttcggag ctcagcgttt ccttgggaaa cg atg aat ttc acc
                                                                            354
B--> 497 met asn Phe thr
                                                                            1
W--> 498 gag goe aac tac gga atg gaa gat tat act ggc tca gat tac tct atg
                                                                         402Glu Ala
B--> 499 asn tyr gly met glu asp tyr thr gly ser asp tyr ser met 5
W--> 500 10
                          15.
                                   20 ttt cca gag acc gag cca tgc
                                           450Phe Pro Glu Thr Glu Pro Cys Ser Leu
W--> 501 tot otg caa gag gto aga gac tto acc
E--> 502 gln glu val arg asp Phe thr
W--> 503 35
                      aag gtg ttc gtg cca atc gcc tac tcc tta atc tgt gtc ttt ggc ctc
W--> 504 498Lys Val Phe Val Pro IIe Ala Tyr Ser Leu IIe Cys Val Phe Gly Leu
                     45 50
W--> 505 40
                                                                ctt ggc aat att atg
W--> 506 gtg gtg ata acc ttt gcc ttc tac aag aaa gcc
                                                     546Leu Gly Asn Ile Met Val Val
E--> 507 Ile thr Phe ala Phe tyr. Lys Lys ala
W--> 508 65
                             agg too atg act gac gto tac cta ttg aac atg goo atc aca
W--> 509 gac ata
                    594Arg Ser Met Thr Asp Val Tyr Leu Leu Asn Met Ala Ile Thr Asp Ile
W--> 510 70
                                            86
                                                                      ctc ttt gtc
W--> 511 ctc acc cta cca ttc tgg gca gtt act cat gcc act gac
                                                            642Leu Phe Val Leu Thr
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RAW SEQUENCE LISTING DATE: 09/13/2005
PATENT APPLICATION: US/10/547,532 TIME: 13:24:41

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\09132005\J547532.raw

some

		_	_																	^^	
B>			Pro	Phe	trp										85					90	
W>.																					
W>				acg	tat		69	OThr	Trp		Phe	Gly	Asn	Thr		Сув	Lys	Leu	Met		GIÀ
E>										105					1,10					115	
₩>																	atg		73	BAla	
E>	517	asn	Phe	asn	cys	gly	met	Leu	Leu	Leu	ala										120
W>					•		130					gac	cgg	tac	att	gcc	atc	gtc	cag	gcg	acc
W>	519	aaa	tct	ttc	cgg	gta	cgc	•	78	geA6	Arg	Tyr	Ile	Ala	Ile	Val	Gln	Ala	Thr		Ser
B>										135					140					145	
W>	521	tcc	aga	aca	ctg	acg	cac	agt	aag	gtc	atc	tgt	ctg	acg	gtg	tgg	ttc			1Ser	Arg
B>	522	thr	Leu	thr	his	ser	Lys	val	Ile	сув	Leu	thr	val	trp	Phe				150		
W>	523	155					160							gtt	tcc	atc	atc	atc	tca	agc	CCC
W>												2Val	Ser	Ile	Ile	Ile	Ser	Ser	Pro	Thr	Phe
B>	525	Phe	Phe	asn	Lys	gln	tyr			165					170			ے		175	
W>	526	180			aag	ctg	cag	ggc	cgt	gat	gtc	tgc	gag	cct	cag	tac	aag	ctc	gtc	tcg	
W>	527	9301	Lys 1	Leu (Gln (Gly i	Arg A	Asp '	Val (Сув (Glu 1	Pro (Gln :	Tyr 1	ys .	Leu 1	7al s	3er			
W>							190					195									.aaa
W>	529	ctg	ctg	ggc	atg	gga	ctc	gag	ctg	ctc	ttt		97	8Glu	Pro	Ile	Thr	Trp	Lys	Leu	Leu
B>	530	gly	met	gly	Leu	glu	Leu	Leu	Phe						200					205	
W>								ttc													ttc
W>	532	atc		1020	5G1y	Phe	Phe	Ile	Pro	Leu	Leu	Phe	Met	Val	Phe	Сув	Tyr	Leu	Phe	Ila	
₩>	533	215	•				220					225									ttg
W>													atc		107	4Ile	Lys	Thr	Leu		Gln
B>	535	ala	gln	asn	ser	Lys	arg	hig	arg	ala	Ile				230					235	
W>													gct								
W>	537	cag	atc	cct		112	2Arg	Val	Val		Ala	Val	Val	Leu		Phe	Leu	Ala	Cys		Ile ·
E>					245					.250			•		255		٠			260	
W>										_	_						ggc		1170	OHie	Asn
M>	540	Met	Val	Leu	Leu	Val		Ala	Ala			-	-	Met	Gly						
W>							270					275									gag
W>											gct		121	BArg		Сла	Ser	Ala	Glu		Ala
E>				tyr	ala	arg									280				_	285	
W>								gtc													tat
W>		_		1266	Glu	Val		Ala	Phe	Leu	His		Cys	Leu	Asp	Pro	Val				
M>							300					305							att		-
W>												aag	gat			4Phe	Ile	Gly	Gln		Phe
E>		_	ser	tyr	Phe	met	Lys	Ile							310		,			315	
M>								_	gtg	tgg	tgt	atg	agg	agg	aag	agc	aag	gtg	cct	acc	ttc
M>			tgt			1362	2VaI	Trp	Cys		Arg	Arg	Lys	Ser		Val	Pro	Thr	Phe		Сув
E>					325		•			330					335					340	
M>																	gta		141(Arg	Val
M>		_	Ser	Glu	Ser	Tyr		Ser	Arg	Gln	Thr		Glu	Thr	Val						
W>							350					355		·_ -	_ /			gac			
M>				acc	atg	taa	cace	gagag	rca c	caaaq	cago	ca .	1463	GLu			Asn	Ala	ser		Pne
E>															360					365	
B>		_	-				ja aa	ectte	rctat	tac	catgi	tga							1502	Z	
		<210		-			•														
		<211				09															
	614	<212	> TY	PE:	DNA																

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RAW SEQUENCE LISTING DATE: 09/13/2005
PATENT APPLICATION: U8/10/547,532 TIME: 13:24:41

Input Set : A:\PTO.AMC.txt

```
615 <213> ORGANISM: Rattus norvegicus (liver)
     617 <220> FEATURE:
     618 <221> NAME/KEY: CDS
     619 <222> LOCATION: (150)..(1250)
     620 <223> OTHER INFORMATION:
W--> 622 <400> 15
E--> 623 gcatctcact acceptctct caatgagcac egetggttgt gcctgtcaac agaatagtcc
W--> 624 60tctcacactt aggactggag cotggacaag cactaaggcg ggggtacctg gccagcccac
B--> 625 120tteggagete agegttteet tgggaaaeg atg aat tte ace gag gee aac tac
E--> 626 met asn Phe thr glu ala asn tyr
                                gga atg gaa gat tat act ggc tca gat tac tct atg ttt cca
                     221Gly Met Glu Asp Tyr Thr Gly Ser Asp Tyr Ser Met Phe Pro Glu Thr
W--> 628 gag acc
                                                                           gag cca tgc
W--> 629 10
                                                20
W--> 630 tot otg caa gag gto aga gac tto acc aag gtg tto gtg
                                                                 269Glu Pro Cys Ser Leu
                                                            25
E--> 631 gln glu val arg asp Phe thr Lys val Phe val
                           40 cca atc gcc tac tcc tta atc tgt gtc ttt ggc ctc
W--> 632 35
                           317Pro Ile Ala Tyr Ser Leu Ile Cys Val Phe Gly Leu Leu Gly
W--> 633 ctt ggc aat att
                                                            50
E--> 634 asn Ile
                                        45
W--> 635 atg gtg gtg ata acc ttt gcc ttc tac aag aaa gcc agg tcc atg act
                                                                             365Met Val
E--> 636 val Ile thr Phe ala Phe tyr Lys Lys ala arg ser met thr
                                               gae gte tac cta ttg aac atg gcc atc aca
W--> 637 65
                            70
W--> 638 gac ata ctc ttt gtc ctc
                                     413Asp Val Tyr Leu Leu Asn Met Ala Ile Thr Asp Ile
E--> 639 Leu Phe val Leu
                                        75
                                                            80
W--> 640 acc cta cca ttc-tgg gca gtt act cat gcc act gac act tgg atc ttt
                                                                             461Thr Leu
E--> 641 Pro Phe trp ala val thr his ala thr asp thr trp Ile Phe
                          . 100
W--> 642 95
                                                        ggc aac acg atg tgt aaa ctg atg :
                                            509Gly Asn Thr Met Cys Lys Leu Met Lys Gly
W--> 643 aaa ggc acg tat gcg gtc aac ttt
E--> 644 thr tyr ala val asn Phe 105
                                                            110
W--> 645 120 aac tgt ggg atg ctg ctc ctg gcc tgt atc agc atg gac cgg tac att
W--> 646 557Asn Cys Gly Met Leu Leu Ala Cys Ile Ser Met Asp Arg Tyr Ile
W--> 647 125
                            130
                                               135
                                                              gec ate gte cag geg acc
W--> 648 aga tot tto ogg gta ogc toc aga aca otg
                                                     605Ala Ile Val Gln Ala Thr Lys Ser
E--> 649 Phe arg val arg ser arg thr Leu
                                                            140
                            acg cac agt aag gtc atc tgt ctg acg gtg tgg ttc gtt tcc atc
W--> 650 150
W--> 651 atc
                 653Thr His Ser Lys Val Ile Cys Leu Thr Val Trp Phe Val Ser Ile Ile
                            160
                                                165
W--> 653 aca ttc ttc ttc aac aag caa tac aag ctg cag ggc
                                                            701Ile Ser Ser Pro Thr Phe
B--> 654 Phe Phe asn Lys gln tyr Lys Leu gln gly
                                                            170
W--> 655 180
                                    cgt gat gtc tgc gag cct cag tac aag ctc gtc tcg gag
                         749Arg Asp Val Cys Glu Pro Gln Tyr Lys Leu Val Ser Glu Pro Ile
W--> 656 ccc atc acg
E--> 657 thr
                    185
                                        190
                                                            195
W--> 658 tgg aaa ctg ctg ggc atg gga ctc gag ctg ctc ttt ggc ttc ttc atc
                                                                             797Trp Lys
W--> 659 Leu Leu Gly Met Gly Leu Glu Leu Leu Phe Gly Phe Phe Ile
                            210
                                             215
                                                                cct ttg ctg ttt atg gtg
                                                     845Pro Leu Leu Phe Met Val Phe Cys
W--> 661 ttc tgt tac ctg ttc atc atc aag acc ttg
E--> 662 tyr Leu Phe Ile Ile Lys thr Leu
W--> 663 230
                            gtg cag gcc cag aat tcc aag agg cac aga gcc atc cga gtc gtg
W--> 664 att
                 893Val Gln Ala Gln Asn Ser Lys Arg His Arg Ala Ile Arg Val Val Ile
W--> 665 235
                                                                        gct gtg gtt ctc
```

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DATE: 09/13/2005 RAW SEQUENCE LISTING PATENT APPLICATION: US/10/547,532 TIME: 13:24:41

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF4\09132005\J547532.raw

W>	666	gtg	ttc	ctg	gct	tgt	cag	atc	cct	cac	aac	atg	gtc		94	lAla	Val	Val	Leu	Val	Phe
E>	667	Leu	ala	cys	gln	Ile	Pro	his	asn	met	val	•			250					255	
W>	668	260	·						ctc	ctc	gtg	act	gca	gcc	aac	acg	ggc	aaa	atg	ggc	cgc
W>	669	agc	tgc	agc		989	Leu	Leu	Val	Thr	Ala	Ala	Asn	Thr	Gly	Lys	Met	Gly	Arg	Ser	Сув
E>	670	Ber			265			•		270					275					280	
M>	671	gcc	gag	aaa	gcc	ctc	gcc	tac	gco	agg	aat	gtg	gct	gag	gtc	ctg	gct		1037	/Ala	Glu
W>	672	Lys	Ala	Leu	Ala	Tyr	Ala	Arg	Asn	Val	Ala	Glu	Val	Leu	Ala						
W>							290				•									tgt	
W>	674	aac	ccc	gtg	ttg	tat	gcc	ttc	att	gga	cag		108	iPhe	Leu	Ris	Сув	Сув	Leu	Asn	Pro
· E>	675	val	Leu	tyr	ala	Phe	Ile	gly	gln						300					305	
W>	676	310					aaa	ttc	aga	agc	tac	ttc	atg	aag	atc	atg	aag	gat	gtg	tgg	tgt
M>	677	atg		1133	3Ľye	Phe	Arg	Ser	Tyr	Phe	Met	Lys	Ile	Met	Lys	Asp	Val	Trp	Cys	Met	
W>	678	315					320					325						agg	agg	aag	agc
M>	679	aag	gtg	cct	acc	ttc	ttc	tgt	gcc	cgg	gtt	tac	tca	•	118	larg	Arg	Lys	Ser	Lys	Val
B>	680	Pro	thr	Phe	Phe	сув	ala	arg	val	tyr	ser				330					335	
W>																				gta	
W>	682	aat	gac	aac		1229	Glu	Ser	Tyr	Ile	Ser	Arg	GIn	Thr	Ser	Glu	Thr	Val	Glu		Asp
E>	683	asn	•	•	345	•	٠			350					355					360	
W>	684	gca	tcg	tcc	ttt	acc	atg	taa	cace	gagag	gca c	aaag	geage	ea to	gece	gaaa	1		1280	DALa	Ser
M>	685	Ser	Phe	Thr	Met														•		
W>	686	365				•		•								gcct	ttgt	tga a	act	tgcta	it
E>	687	taca	atgto	ja					1309												

USPTO 5/1/2006 2:11 PM PAGE 12/018 Fax Server TO: Antionette Peters COMPANY:

10/547,532 10

<210>

<211> 20

<212> DNA

<213> Artificial

<220>

<221> misc_feature

<223> Oligonucleotide designed to act as primer for amplifying fragment

of rat MIP-35;) gene transcript.

(They cannot be processed by CRF software.)

The types of errors shown exist throughout the Sequence Listing. Please check subsequent

sequences for similar entus.

.USPTO 5/1/2006 2:11 PM PAGE 13/018 Fax Server TO:Antionette Peters COMPANY:

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 09/13/2005 PATENT APPLICATION: US/10/547,532 TIME: 13:24:42

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\09132005\J547532.raw

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

```
Seq#:1; Line(s) 47,48,49,50,51,52,53,54,55,56,57,59,60,61
Seq#:3; Line(s) 104,105,107,108,109,110,111,112,113,114,115,116,117,118,119
Seq#:5; Line(s) 161,162,163,164,165,166,167,168,169,170,171,172,173,174,175
Seq#:5; Line(s) 176,177
Seq#:7; Line(s) 211,212,213,214,215,216,217,218,219,220,221,222,223,224,225
Seq#:7; Line(s) 226,227,228,229,230,231,232,233,234,235,236,237,238,239,240
Seq#:7; Line(s) 241,242,243,244,245,246,247,248,249,250,251,252,253,254,255
Seq#:7; Line(s) 256,257,258,259,260,261,262,263,264,265,266,267,268,269,270
Seq#:7; Line(s) 271
Seq#:9; Line(s) 340,341,342,343,344,345,346,347,348,349,350,351,352,353,354
Seq#:9; Line(s) 355,356,357,358,359,360,361,362,363,364,365,366,367,368,369
Seq#:9; Line(s) 370,371,372,373,374,375,376,377,378,379,380,381,382,383,384
Seq#:9; Line(s) 385,386,387,388,389,390,391,392,393,394,395,396,397,398
Seq#:13; Line(s) 496,497,498,499,500,501,502,503,504,505,506,507,508,509
Seq#:13; Line(s) 510,511,512,513,514,515,516,517,518,519,520,521,522,523
Seq#:13; Line(s) 524,525,526,527,528,529,530,531,532,533,534,535,536,537
Seq#:13; Line(s) 538,539,540,541,542,543,544,545,546,547,548,549,550,551
Seq#:13; Line(s) 552,553,554,555,556
Seq#:15; Line(s) 625,626,627,628,629,630,631,632,633,634,635,636,637,638
Seq#:15; Line(s) 639,640,641,642,643,644,645,646,647,648,649,650,651,652
Seq#:15; Line(s) 653,654,655,656,657,658,659,660,661,662,663,664,665,666
Seq#:15; Line(s) 667,668,669,670,671,672,673,674,675,676,677,678,679,680
Seq#:15; Line(s) 681,682,683,684,685
```

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seg#:11,12,16,17,18,19,20,21

VERIFICATION SUMMARY DATE: 09/13/2005
PATENT APPLICATION: US/10/547,532 TIME: 13:24:42

Input Set : A:\PTO.AMC.txt

```
L:10 M:270 C: Current Application Number differs, Replaced Current Application Number
 L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:41 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:1,Line#:34
L:46 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:1,Line#:39
L:46 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:1,Line#:44
 L:47 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:17
L:48 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
 L:48 M:254 E: No. of Bases conflict, LENGTH:Input:-25 Counted:43 SEQ:1
 L:48 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:17
 L:48 M:112 C: (48) String data converted to lower case,
L:49 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:10
L:50 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:50 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:9
L:51 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:25
L:51 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
M:254 Repeated in SeqNo=1
L:51 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:5
M:112 Repeated in SeqNo=1
L:52 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:17
L:53 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:53 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:1
L:54 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:54 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:8
L:55 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:55 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:12
M:341 Repeated in SeqNo=1
L:56 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:56 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:13
L:57 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:15
L:58 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:58 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:3
L:59 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:59 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:5
L:60 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:60 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:15
L:61 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:61 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:14
L:62 M:252 E: No. of Seq. differs, <211> LENGTH:Input:288 Found:127 SEQ:1
L:98 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:3, Line#:91
L:103 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:3, Line#:96
L:103 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:3, Line#:101
L:104 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:17
L:105 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:105 M:254 E: No. of Bases conflict, LENGTH:Input:-25 Counted:43 SEQ:3
L:105 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:20
L:105 M:112 C: (48) String data converted to lower case,
M:254 Repeated in SegNo=3
L:107 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:17
```

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/547,532

DATE: 09/13/2005

TIME: 13:24:42

Input Set : A:\PTO.AMC.txt

```
L:108 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3.
 L:109 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
 L:109 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:10
 L:110 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
 L:110 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:11
 L:111 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:22
L:111 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:111 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:7
M:112 Repeated in SeqNo=3
L:112 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:15
L:113 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:113 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:3
L:114 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:114 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:6
L:115 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:115 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:14
M:341 Repeated in SeqNo=3
L:116 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:116 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID REYS:12
L:117 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:14
L:118 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:118 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:5
L:119 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:119 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:2
L:119 M:252 B: No. of Seq. differs, <211> LENGTH:Input:288 Found:106 SEQ:3
L:155 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:5,Line#:148
L:160 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:5,Line#:153
L:160 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:5,Line#:158
L:161 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:17
L:162 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5
L:162 M:254 B: No. of Bases conflict, LENGTH:Input:-25 Counted:43 SEQ:5
L:162 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:17
L:162 M:112 C: (48) String data converted to lower case,
L:163 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:11
L:164 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5
L:164 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:8
L:165 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:25
L:165 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5
M:254 Repeated in SeqNo=5
L:165 M:320 B: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:3
M:112 Repeated in SeqNo=5
L:166 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:17
L:167 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5
L:167 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:1
L:168 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5
L:168 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:9
L:169 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5
L:169 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:11
M:341 Repeated in SeqNo=5
```

VERIFICATION SUMMARY DATE: 09/13/2005
PATENT APPLICATION: US/10/547,532 TIME: 13:24:42

Input Set : A:\PTO.AMC.txt

```
L:170 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5
 L:170 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:10
 L:171 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:16
 L:172 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5
 L:172 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:2
 L:173 M:336 W: Invalid Amino Acid Number in Coding Region, SEO ID:5
 L:173 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:7
 L:174 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5
 L:174 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:13
 L:175 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5
L:175 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:11
L:176 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:2
L:177 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5
L:177 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:4
L:177 M:252 E: No. of Seq. differs, <211> LENGTH:Input:291 Found:118 SEQ:5
L:210 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:7, Line#:208
L:211 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:17
L:212 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:212 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7
L:212 M:254 E: No. of Bases conflict, LENGTH:Input:1 Counted:42 SEQ:7
L:212 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:15
L:212 M:112 C: (48) String data converted to lower case.
L:213 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:9
L:214 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7
L:214 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:11
L:215 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7
M:254 Repeated in SeqNo=7
L:215 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:6
M:112 Repeated in SeqNo=7
L:216 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:16
L:217 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7
L:217 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:2
L:218 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7
L:218 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:7
L:219 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7
L:219 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:13
M:341 Repeated in SegNo=7
L:220 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7
L:220 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:14
L:221 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:14
L:222 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7
L:222 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:4
L:223 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7
L:223 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:1
L:224 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:17
L:225 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7
L:226 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7
L:226 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:9
L:227 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7
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PATENT APPLICATION: US/10/547.532 TIME: 13:24:42

Input Set : A:\PTO.AMC.txt

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L:227 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:11
L:228 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7
L:228 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:7
L:229 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:16
L:230 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7
L:230 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:2
L:231 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7
L:231 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:7
L:232 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:7
L:232 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:13
L:233 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:10
L:234 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:14
L:241 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:5
L:246 M:320 B: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:17
L:254 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:9
L:259 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:7
L:262 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:1
L:267 M:320 B: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:6
L:272 M:252 B: No. of Seq. differs, <211> LENGTH:Input:1122 Found:294 SEQ:7
L:339 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:9,Line#:337
L:341 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
L:341 M:254 B: No. of Bases conflict, LENGTH: Input: 1 Counted: 42 SEO: 9
L:341 M:320 B: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:9
L:341 M:112 C: (48) String data converted to lower case,
M:254 Repeated in SeqNo=9
L:344 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:9
M:112 Repeated in SeqNo=9
M:341 Repeated in SeqNo=9
L:349 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:11
L:352 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:1
L:357 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:10
L:362 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:11
L:370 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:6
L:375 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:16
L:378 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:1
L:383 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:8
L:388 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:11
L:391 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:1
L:396 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:8
L:399 M:252 E: No. of Seq. differs, <211> LENGTH:Input:1101 Found:294 SEQ:9
L:490 M:258 W: Mandatory Peature missing, <223> Blank for SEQ#:13, Line#:488
L:491 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:60 SEQ:13
M:254 Repeated in SegNo=13
L:496 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:3
M:341 Repeated in SeqNo=13
L:497 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:3
M:112 Repeated in SegNo=13
L:499 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:9
L:502 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:6
```

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Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\09132005\J547532.raw

L:507 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:11 L:512 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:12 L:517 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:16 L:520 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:3 L:522 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:15
L:525 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:6
L:530 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:12
L:535 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:9 L:557 M:252 E: No. of Seq. differs, <211> LENGTH:Input:1502 Found:528 SEQ:13 L:622 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:15,Line#:620 L:623 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:60 SEQ:15 M:254 Repeated in SeqNo=15 M:341 Repeated in SeqNo=15 M:112 Repeated in SeqNo=15

L:687 M:252 E: No. of Seq. differs, <211> LENGTH:Input:1309 Found:470 SEQ:15